International application No. PCT/KR2004/001440

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC7 G06F 17/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean patents and applications for inventions since 1975 and Korean utility models and applications for utility models since 1975 Japanese utility models and applications for utility models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
KR 2001-00219 B1 (TWOAD CO., LTD.) 05 JANUARY 2001 see the abstract	1-24
JP 14-109005 A ( CASIO COMPUT CO LTD ) 12 APRIL 2002 the whole document	1-24
KR 2001-08277 A (CHO, JANG HWAN) 5 FEBRUARY 2001 the whole document	1-24
JP 10-312415 A (DAINIPPON PRINTING CO LTD) 24 NOVEMBER 1998 the whole document	1-24
KR 2003-43678 A (KABUSHIKI KAISHA WORLD) 2 JUNE 2003 the whole document	1-24
	KR 2001-00219 B1 (TWOAD CO., LTD.) 05 JANUARY 2001 see the abstract  JP 14-109005 A (CASIO COMPUT CO LTD.) 12 APRIL 2002 the whole document  KR 2001-08277 A (CHO, JANG HWAN.) 5 FEBRUARY 2001 the whole document  JP 10-312415 A (DAINIPPON PRINTING CO LTD.) 24 NOVEMBER 1998 the whole document  A  KR 2003-43678 A (KABUSHIKI KAISHA WORLD.) 2 JUNE 2003

L	Further documents	are listed	in the continuation	n of Box C.
---	-------------------	------------	---------------------	-------------

X | See patent family annex.

- Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
09 AUGUST 2004 (09.08.2004)

Date of mailing of the international search report

11 AUGUST 2004 (11.08.2004)

Name and mailing address of the ISA/KR

Korean Intellectual 920 Dunsan-dong, Republic of Korea Facsimile No. 82-42-472-7140

Korean Intellectual Property Office 920 Dunsan-dong, Sco-gu, Daejeon 302-701, Republic of Korea

KANG, Gab Youn

Authorized officer

Telephone No. 82-42-481-5914

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/KR2004/001440

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 2001-00219 B1	05.01.2001	KR 1999-49280	08.11.1999
JP 14-109005 A	12.04.2002	None	
KR 2001-08277 A	05.02.2001	None	
JP 10-312415 A	24.11.1998	None	
KR 2003-43678 A	02.06.2003	JP 2001-361058	27.11.2001